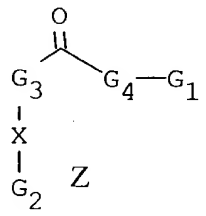
CLAIMS

1. A composition, comprising:

a pharmaceutical preparation of a compound having the following formula:



wherein G1 is selected from the group consisting of (C_1-C_6) alkyl, (C_1-C_6) alkenyl, aryl group or a heteroaryl group, wherein the aryl or heteroaryl is a ring having 5, 6, or 7 atoms, and wherein at least one atom of the heteroaryl is selected from the group consisting of a sulfur, a nitrogen, and an oxygen atom, wherein G2 is a group having a net charge, selected from the following: -CN ($R_1R_2R_3$), -N-($R_1R_2R_3$), or a heteroaryl group, wherein the heteroaryl is a ring having 5, 6, or 7 atoms, and wherein at least one atom of the heteroaryl is selected from the group consisting of a sulfur, a nitrogen, and an oxygen atom, wherein R_1, R_2, and R_3 independent of one another are selected from the group consisting of -H, -CH_3, -CH_2CH_3, or other linear alkyl groups such as propyl, butyl, or pentyl, wherein G3 and G4 independent of one another are selected from the group consisting of N, S, O, (C_1-C_6) alkyl, and (C_1-C_6) alkenyl, wherein X is a (C_1-C_{12}) alkyl and wherein Z is a charged species, the charge depends on the charge of G2 in a pharmaceutically acceptable carrier.

2. The composition of claim 1, wherein the compound is *N*-ethyl-*N*'-(3-dimethylaminopropyl) urea.

3. The composition of claim 1, wherein the compound is *N*-ethyl-*N*'-(3-dimethylaminopropyl) urea methiodide.

4. The composition of claim 1, wherein the compound is 5-50% by weight of the composition.

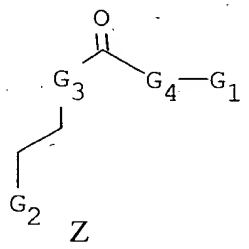
5. The composition of claim 1, further comprising a therapeutic agent.

6. The composition of claim 5, wherein the therapeutic agent is an anti-infectious disease agent.

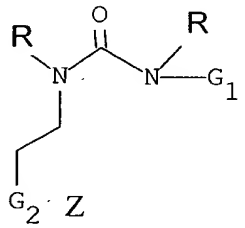
7. The composition of claim 6, wherein the anti-infectious disease agent is an anti-bacterial agent.

8. The composition of claim 6, wherein the anti-infectious disease agent is an anti-viral agent.

9. The composition of claim 1, wherein the compound has the following formula:



10. The composition of claim 9, wherein the compound has the following formula:



wherein each R is independently selected from the group consisting of hydrogen, (C_1-C_6) alkyl, and (C_1-C_6) alkenyl.

11. The composition of claim 1, further comprising a sustained release delivery system and wherein the composition is formulated to release the compound over a period of at least 2 hours.

12. The composition of claim 1, wherein the sustained release delivery system is a microencapsulated product.

13. The composition of claim 11, wherein the sustained release delivery system is a sustained release capsule.

14. The composition of claim 11, wherein the sustained release delivery system is a fatty acid carrier.

15. The composition of claim 14, wherein the fatty acid carrier includes C_9-C_{20} fatty acids.

16. The composition of claim 11, wherein the sustained release delivery system is a microparticle.

17. The composition of claim 11, wherein the sustained release delivery system is a medicinal pump.

18. The composition of claim 11, wherein the sustained release delivery system is formulated to release the compound over a period of at least 12 hours.

19. The composition of claim 11, wherein the sustained release delivery system is formulated to release the compound over a period of at least 24 hours.

20. The composition of claim 11, wherein the sustained release delivery system is formulated to release the compound over a period of at least 2 days.

21. The composition of claim 11, wherein the sustained release delivery system is formulated to release the compound over a period of at least 7 days.

22. A method for preventing a disorder associated with NOS, comprising administering to a subject an effective amount of a pharmaceutical composition of claim 1 to prevent NOS activity.

23. The method of claim 22, wherein the pharmaceutical composition is administered to the subject over a period of time.

24. The method of claim 22, wherein the subject has or is at risk of developing a disease selected from the group consisting of Hypertension, Familial Hyperchloesterolemia, Endothelial Dysfunction, Atherosclerosis, Graft/Transplantation Rejection, Asthma, Neurogenic Airway Edema, Ulcerative Colitis, Colonic Inflammation, Periodontal Disease, Cystic Fibrosis, Diabetes Melitis, Vascular Hyporeactivity, Cerebral Ischemia, Migraine, Alzheimer's Disease, and Multiple Sclerosis.

25. A method for preventing an inflammatory response, comprising administering to a subject an effective amount of a pharmaceutical composition of claim 1 to prevent an inflammatory response.

26. The method of claim 25, wherein the pharmaceutical composition is administered to the subject over a period of time.

27. The method of claim 25, wherein the subject is at risk of exposure to an infectious agent.

28. The method of claim 27, wherein the pharmaceutical composition is administered to the subject between 2 and 48 hours before exposure of the subject to the infectious agent.

29. The method of claim 27, wherein the pharmaceutical composition is administered to the subject between 2 and 8 hours before exposure of the subject to the infectious agent.

30. The method of claim 25, wherein the method is a method for preventing sepsis and the subject is a subject at risk of developing sepsis.

31. The method of claim 30, wherein the pharmaceutical composition comprises a prodrug of *N*-ethyl-*N'*-(3-dimethylaminopropyl) urea or *N*-ethyl-*N'*-(3-dimethylaminopropyl) urea methiodide.

32. The composition of claim 31, wherein the prodrug comprises a gel containing an activated polyanionic polysaccharide.

33. The method of claim 32 wherein said polyanionic polysaccharide is selected from the group consisting of hyaluronic acid, carboxymethylcellulose, and mixtures thereof.

34. The method of claim 33 wherein the polyanionic polysaccharide is hyaluronic acid.

35. The method of claim 33 wherein the polyanionic polysaccharide is carboxymethylcellulose.

36. The method of claim 33 wherein the polyanionic polysaccharide is a mixture of hyaluronic acid and carboxymethylcellulose.

37. The method of claim 32 wherein the activated polyanionic polysaccharide is prepared by reacting a polyanionic polysaccharide with a cross-linking agent.

38. The method of claim 32 wherein the activated polyanionic polysaccharide is prepared by reacting a polyanionic polysaccharide with a derivatizing agent.

39. The method of claim 38 wherein the derivatizing agent is a carbodiimide.

40. The method of claim 39 wherein said carbodiimide comprises 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide, or 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide methiodide.

41. The method of claim 30 wherein the subject is a human patient.

42. The method of claim 41 wherein the exposure of the human patient to bacterial contamination is the result of a surgical procedure performed on the patient.

43. The method of claim 42 wherein the surgical procedure is abdominal surgery.

44. The method of claim 42 wherein the bacterial contamination is Gram negative bacterial contamination.

45. The method of claim 44 wherein the bacterial contamination is *E. coli.* contamination.

46. The method of claim 30 wherein the pharmaceutical preparation is administered to the subject between about 2 hours and 48 hours prior to the exposure of the subject to the bacterial contamination.

47. The method of claim 30 wherein the pharmaceutical preparation is administered to the subject between about 2 hours and 6 hours prior to the exposure of the subject to the bacterial contamination.

48. The method of claim 30 wherein the pharmaceutical composition includes an antimicrobial agent.

49. The method of claim 48 wherein the antimicrobial agent is gentamicin or clindamycin.

50. The method of claim 25, wherein the subject has or is at risk of developing a disease having an inflammatory component.

51. The method of claim 50, wherein the inflammatory disease is selected from the group consisting of meningitis, cerebral edema, arthritis, nephritis, adult respiratory distress syndrome, pancreatitis, myositis, neuritis, connective tissue diseases, phlebitis, arteritis, vasculitis, allergy, anaphylaxis, ehrlichiosis, gout, organ transplants, multiple sclerosis, and inflammatory bowel disease.

52. The method of claim 25, wherein the pharmaceutical composition is administered systemically.

53. The method of claim 52, wherein the pharmaceutical composition is administered orally.

54. The method of claim 52, wherein the pharmaceutical composition is administered parenterally.

55. The method of claim 52, wherein the pharmaceutical composition is administered in a sustained release device.

56. The method of claim 25, wherein the pharmaceutical composition is administered locally.

57. A method for preventing surgical adhesions, comprising administering to a subject an effective amount of a pharmaceutical composition of claims 1 or 31 to prevent surgical adhesions.

58. The method of claim 57, wherein the pharmaceutical composition is administered to the subject over a period of time.

59. The method of claim 58, wherein the pharmaceutical composition is administered to the subject between 2 and 48 hours before surgery.

60. The method of claim 58, wherein the pharmaceutical composition is administered to the subject between 2 and 8 hours before surgery.

61. The method of claim 57, wherein the pharmaceutical composition is administered systemically.

62. The method of claim 57, wherein the pharmaceutical composition is administered orally.

63. The method of claim 57, wherein the pharmaceutical composition is administered parenterally.

64. The method of claim 57, wherein the pharmaceutical composition is administered in a sustained release device.

65. The method of claim 57, wherein the pharmaceutical composition is administered locally.

66. The method of claim 57, wherein the subject is undergoing a surgery selected from the group consisting of abdominal surgery, gynecological surgery and cardiac surgery.

67. The method of claim 57, wherein the pharmaceutical composition is administered to the subject at the same time as surgery.

68. A method of inhibiting restenosis, the method comprising the administration of the compound of claim 1 in an effective amount to prevent proliferation of cells contributing to the restenosis.

69. The method of claim 68, wherein the restenosis is arterial restenosis of the arterial wall caused by the proliferation of endothelial cells on the area of trauma after balloon angioplasty.

70. A method for preventing a disorder by elevating levels of IL-10, comprising:

administering to a subject an effective amount of a pharmaceutical composition of claim 1 to elevate IL-10 activity.

71. The method of claim 70, wherein the pharmaceutical composition is administered to the subject over a period of time.

add B1

add C5